

IN THE ABSTRACT

As requested by the U.S. Patent Office, the Abstract has been shortened as follows:

ABSTRACT OF THE DISCLOSURE

There is disclosed a transceiver for use in a base station of a fixed wireless network that communicates with a plurality of subscriber transceivers via time division duplex (TDD) channels. The transceiver comprises: 1) a receiver front-end for receiving data burst transmissions from the plurality of subscriber transceivers in an uplink portion of a TDD channel, wherein the receiver front-end demodulates the received data burst transmissions into a digital baseband signal in-phase (I) signal and a digital baseband quadrature (Q) signal; 2) a first frequency domain feedforward equalization filter for receiving the I signal; 3) a second frequency domain feedforward equalization filter for receiving the Q signal; 4) an adder for producing a combined symbol estimate sequence; 5) a slicer for receiving and quantizing the combined symbol estimate sequence; and 6) a time domain feedback filter for generating a symbol correction sequence.